

Abstract

A composition for forming an antireflection coating, characterized in that it comprises an organic solvent and, dissolved therein, (A) a ladder silicone copolymer containing (a_1) 10 to 90 mole % of a (hydroxyphenylalkyl)silsesquioxane unit, (a_2) 0 to 50 mole % of a (alkoxyphenylalkyl)silsesquioxane unit and (a_3) 10 to 90 mole % of an alkyl or phenylsilsesquioxane unit, (B) an acid generator generating an acid upon exposure to heat or light, and (C) a crosslinking agent, and is capable of forming an antireflection coating exhibiting an optional parameter (k value) for an ArF laser of the range of 0.002 to 0.95. The composition is soluble in an organic solvent, can be applied by a conventional spin coating method with ease, has good storage stability, and can exhibit an adjusted preventive capability for reflection through the introduction of a chromophoric group absorbing a radiation ray thereto.